

Department of Environmental Quality

Division of Air Quality

Permit Application  
(Please type or print)

1. Company Name: Solvay Soda Ash Joint Venture
2. Mailing address: P.O. Box 1167 (#1 Westvaco Road) Green River, Wyoming 82935
3. Plant name (if different from #1): (same)
4. Plant Location (if different from #2): NE ¼ of Section 31, Township 18 North, Range 109 West  
Sweetwater County, Wyoming  
Plant Mailing Address: (same as above)
5. Name of Owner: Solvay Soda Ash Joint Venture phone #(307) 875-6500
6. Responsible Official: Richard L. Casey phone #(307)875-6500
7. Permit application is made for:  

<input type="checkbox"/> New construction	<input checked="" type="checkbox"/> Modification
<input type="checkbox"/> Relocation	<input type="checkbox"/> Operation
8. Type of equipment to be constructed, modified, or relocated. (Please list each major piece of equipment separately.)  

_____	_____	_____	_____
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9. If application is being made for operation of an existing source in a new location, list previous location and new location: N/A  
Previous location: \_\_\_\_\_  
New location: \_\_\_\_\_
10. Crushing Activities: \_\_\_\_\_

a. Primary crushing	Type control equipment _____
b. Secondary crushing	Type control equipment _____
c. Tertiary crushing	Type control equipment _____
d. Recrushing & screening	Type control equipment _____
e. Conveying	Type control equipment _____
f. Drying	Type control equipment _____
g. Other	Type control equipment _____
10. Crushing Activities Continued:

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Proposed dates of operation (month/year) January, 1997

11. Materials used in unit or process (include solid fuels):

Material	Process Weight Average (lb/hr)	Process Weight Maximum (lb/hr)	Quantity/Year

12. Air contaminants emitted:

Emission Point	Pollutant	lb/hr	ton/yr	Basis of Data
AQD #74 (North Headframe BH)	particulate	0.61	2.66	estimate
AQD #75 (Primary Crushing BH)	particulate	2.43	10.66	estimate
AQD #76 (Primary Screening BH)	particulate	2.43	10.66	estimate
AQD #77 (Transfer BH)	particulate	0.61	2.66	estimate
AQD #78 (Transfer BH)	particulate	0.61	2.66	estimate
AQD #79 (Transfer Point DC)	particulate	0.35	1.55	estimate
AQD #80 (Calcliner ESP)	particulate	20	88	estimate
	NO <sub>x</sub>	20	88	
AQD #81 (Dryer Area BH)	particulate	10	44	estimate
AQD #82 (Dryer ESP)	particulate	7.13	31.23	estimate
	NO <sub>x</sub>	20	88	
AQD #83 (Silo Top BV)	particulate	0.54	2.35	estimate
AQD #84 (Silo Bottom BF)	particulate	1.14	4.97	estimate

13. Air contaminant control equipment:

Emission Point	Type	Pollutant Removed	Efficiency
AQD #74	Mikro Pulsaire Dust Collector Model 49S-10-20	particulate	99.9%
AQD #75	Mikro Pulsaire Dust Collector Model 49S-10-20	particulate	99.9%
AQD #76	Mikro Pulsaire Dust Collector Model 49S-10-20	particulate	99.9%
AQD #77	Mikro Pulsaire Dust Collector Model 49S-10-20	particulate	99.9%
AQD #78	Mikro Pulsaire Dust Collector Model 49S-10-20	particulate	99.9%
AQD #79	Ducon Twin Arrangement Cyclones Size 2-145	particulate	50%
AQD #80	Ducon Oriclone Venturi Scrubber	particulate NO <sub>x</sub>	99.9% NO <sub>x</sub>
AQD #81	Ducon Oriclone Venturi Scrubber	particulate	99.9%
AQD #82	Ducon Oriclone Venturi Scrubber	particulate NO <sub>x</sub>	99.9% NO <sub>x</sub>
AQD #83	Ducon Oriclone Venturi Scrubber	particulate	99.9%
AQD #84	Norton Snowflake Packed Bed 5 ft dia X 12.5 ft deep	SO <sub>2</sub>	99%

14. Type of combustion unit<sub>(check if applicable)</sub> :

A. Coal \_\_\_\_\_

1. Pulverized \_\_\_\_\_:

General \_\_\_\_\_; Dry Bottom \_\_\_\_\_; With Flyash Reinjection \_\_\_\_\_;

14. Type of combustion unit (continued)

2. Spreader Stoker \_\_\_\_\_:

With Flyash Reinjection \_\_\_\_\_; Without Flyash Reinjection \_\_\_\_\_; Cyclone \_\_\_\_\_;

Hand-Fired \_\_\_\_\_;

B. Fuel Oil \_\_\_\_\_

Horizontally Fired \_\_\_\_\_; Tangentially Fired \_\_\_\_\_;

C. Natural Gas   X  

D. If other, please specify \_\_\_\_\_

Hourly fuel consumption (estimate for new equipment) \_\_\_\_\_ /hr.

Size of combustion unit \_\_\_\_\_ BTU heat input/hour.

15. Operating Schedule:   24   hours/day;   7   days/week;   52   weeks/year.

Peak production season (if any):   None  

16. Fuel analysis:

	A. Coal	B. Fuel Oil	C. Natural Gas
% sulfur			
% ash			
BTU Value			1080 Btu/SCF

17. Products of process or units:

Products	Quantity/Year
Bagged Soda Ash	1.2 MM Tons/Year

18. Emissions to the atmosphere (each point of emission should be listed separately and numbered so that it can be located on the flow sheet): **This information is preliminary, it will be submitted when final specifications have been defined.**

Emission Point	Stack Height (ft)	Stack Diameter (ft)	Gas Discharged SCFM	Exit Temp (°F)	Gas Velocity (ft/s)
AQD #74			4731	68	
AQD #75			18924	68	
AQD #76			18924	68	
AQD #77			4731	68	
AQD #78			4731	68	
AQD #79			2760	68	
AQD #80			109028	350	
AQD #81			27598	68	
AQD #82			55456	450	
AQD #83			4179	68	
AQD #84			8831	68	

19. Does the input material or product from this process or unit contain finely divided materials which could become airborne?

  X   Yes                             No

Is this material stored in piles or in some other way as to make possible the creation of dust problems?

  X   Yes                             No

List storage piles (if any):

Type of Material	Particle Size (Diameter or Screen Size)	Pile Size (Average Tons on Pile)	Pile Wetted (Yes or No)	Pile Covered (Yes or No)
Trona			No	Yes

20. Using a flow diagram:
- (1) Illustrate input of raw materials.
  - (2) Label production processes, process fuel combustion, process equipment, and air pollution control equipment.
  - (3) Illustrate locations of air contaminant release so that emission points under items 11, 12 and 17 can be identified. For refineries, show normal pressure relief and venting systems. Attach extra pages as needed.
21. A site map should be included indicating the layout of facility at the site. All buildings, pieces of equipment, roads, pits, rivers and other such items should be shown on the layout.  
**See Drawing No.**
22. A location drawing should be included indicating location of the facility with respect to prominent highways, cities, towns, or other facilities (include UTM coordinates).  
**See Site Location Map.**

*"I certify to the accuracy of the plans, specifications, and supplementary data submitted with this application. It is my opinion that any new equipment installed in accordance with these submitted plans and operated in accordance with the manufacturer's recommendations will meet emission limitations specified in the Wyoming Air Quality Standards and Regulations."*

Signature \_\_\_\_\_

Typed Name **Richard L. Casey**

Title **Vice President**

Company **Solvay Soda Ash Joint Venture**

Mailing Address **P.O. Box 1167, Green River, Wyoming 82935** Telephone **(307) 875-6500**

P.E. Registration (if applicable) **N/A**

State where registered \_\_\_\_\_